

## Fishery Fact Sheet

CECAF Fisheries Reports 2013

# Spain Freezer bottom trawl shrimp fishery - Mauritanian waters, 2013

*Crevettiers congélateurs espagnols*

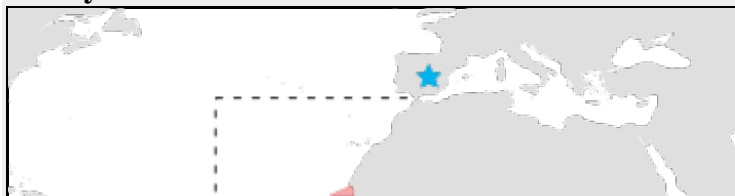
### Data Ownership

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**Fishery life cycle** This fishery terminated on 2012.

**Overview:** The fleet is composed of freezer shrimp-trawlers traditionally based in the Spanish Port of Huelva (SW Iberian Peninsula). These vessels operate in Mauritanian waters through EU-licences, which have annual and renewable character. Most of these vessels have shared licences with other fishing grounds, as Guinea Bissau, Guinea (until 2008) or Senegal (until 2006). They carry out fishing trips of different duration, which can oscillate from one to three months. *P. longirostris* and *F. notialis* are the target species of this fishery, both together constituting 80% of the catches, being *P. longirostris* the most abundant (47%). Both species are fished in shallower shelf waters, while other species as *A. varidens* and *C. maritae* are caught in deeper fishing grounds, each one constituting the 6% of the total catches. The main by-catch species are *Melicertus kerathurus*, *Aristeomorpha foliacea* and *Aristaeopsis edwardsiana*. Fishing depths are different depending on the target species: < 60 m for *F. notialis*, 170-300 m for *P. longirostris* and 350-700 m for *A. varidens* and *C. maritae*. Spanish shrimpers usually alternate the use of outriggers and the classic bottom otter trawl with trawl doors ("baka" type), depending on the target species. Thus, outriggers are used to fish *P. longirostris* and *F. notialis*, usually during daylight hauls, while the classic bottom otter trawl with trawl doors is employed for a deeper fishery, especially targeting *A. varidens* and *C. maritae*. These last deep hauls are usually made at night. Catches are frozen and transferred to merchant vessels, which transport them to the Port of Huelva. Main crustacean species are classified by sizes after their catches and commercialized in different categories. Greater yields of *P. longirostris* are obtained during the first six months of the year. During the summer the fishery especially targets *F. notialis*, as it occurs in November and December, after the close season. Maximum yields of both species are obtained during these two months. Nowadays, this fleet is allowed to fish in Mauritanian waters north of Cap Timiris (19°15.6'N), out of the protected area delimited in the Fishery Agreement and South Cap Timiris, beyond 6 miles.

### Location of Spain Freezer bottom trawl shrimp fishery - Mauritanian waters



### APPROACH: FISHING ACTIVITY

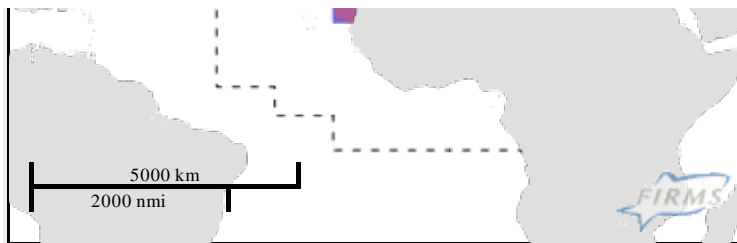
#### Fishing Activity

Fishing Gear: Bottom otter trawls [more>>](#)

Type of production system: Commercial;

Industrial

Fishery Area: Mauritania; Atlantic, East ...



#### Main layers

- FAO areas and their sub-divisions
- EEZ

#### Associated layers

- Geographic reference

#### Intersecting layers

- Intersecting: FAO major fishing areas

#### Base layers

- 200 nautical miles arcs

Seasonality: November-April ...

### Harvested Resource

Target Species: Deep-water rose shrimp; Southern pink shrimp; Striped red shrimp ...  
more>>

Associated Species: Plesionika shrimps nei; Caramote prawn; Aristaeopsis edwardsiana ...  
more>>

### Means of Production

Vessel Type: Stern trawlers freezer more>>

### Fishery Indicators

Nominal Effort: Number of vessels  
Participation: Number of fishermen  
Production: Catch total; Catch P. longirostris; Catch F. notialis; Catch A. varidens; Catch C.maritae; Catch other crustaceans

Geographic reference: Spain

Spatial Scale: National

## Table of Contents

Overview - Fishery History - Fishing Activity - Post Harvest - Management - Status and Trends - Source of Information

## History

The shrimp Spanish fishery in Mauritanian waters have been traditionally developed into the framework of fisheries agreements. The first one was signed by the Spanish Administration and Mauritania in 1964. Since 1987, these agreements have been negotiated and established through the EU.

## Fishing Activity

Type of production system: Commercial; Industrial

### Fishery Area

Climatic zone: Temperate. Bottom type: Soft\_bottom\_clean\_sand; Soft\_bottom\_muddy\_or\_muddy-sand. Depth zone: Coastal (0 m - 50 m); Shelf (50 m - 200 m); Slope (200 m - 1000 m). Horizontal distribution: Neritic. Vertical distribution: Demersal/Benthic.

Geo References for: Mauritania

### Mauritania

Exclusive Economic Zone Areas (EEZ)	MRT - Mauritania
FAO Fishing Statistical Subdivisions	34.3.11 - Atlantic, East central / 34.3.11

### More Geo References

The following area codes have been found as intersecting the location of Spain Freezer bottom trawl shrimp fishery - Mauritanian waters

FAO Major Fishing Areas	34 - Atlantic, Eastern Central
Large Marine Ecosystem Areas (LME)	27 - Canary Current

The Mauritanian coast is part of one of the four major trade-wind driven continental margin upwelling zones in the world oceans, the northwestern African upwelling system (or the Canary Current System). In the Eastern Central Atlantic, the dynamics of an eastern boundary current interacting with trade wind-driven upwelling control this marine ecosystem with exceptionally high primary and secondary productivity (Cury and Roy, 1989; Binet, 1997; Demarcq and Faure, 2000). The upwelling off Mauritania is being described as a wind driven upwelling system restricted to a narrow strip along the coast. It can be separated into two regimes: south of approximately 20°N upwelling is most pronounced during winter and spring, whereas upwelling north of 20°N occurs all year round with a maximum intensity in summer and early fall (Mittelstaedt, 1991). The marked seasonality of upwellings and the latitudinal displacement through the Mauritanian and Senegalese coasts, produce important changes in the structure of the biological communities. In short periods (weeks), the system can alternate from a warm equatorial phase to a cold subtropical phase, this deriving in an alternated dominance between tropical and templates communities (Meiners, 2007). Off Cape Blanc the upwelling occurs throughout the year with periods of stronger intensity, while it lasts nine months off Nouakchott.

## Resources Exploited

Deepwater rose shrimp - Morocco, Mauritania, Senegal and Gambia

Southern pink shrimp - Mauritania, Senegal and Gambia

Striped red shrimp - Morocco, Mauritania, Senegal and Gambia

Caramote prawn - Morocco, Mauritania, Senegal and Gambia

Giant red shrimp - Morocco, Mauritania, Senegal and Gambia

Senegal hake, Benguela hake - Mauritania, Senegal and Gambia

Octopus - Mauritania

Cuttlefish - Morocco, Mauritania Senegal and Gambia

Other resources: Stocks of plesionika shrimps, aristaeidae, anglers, soles, flounders, sharks and rosefishes.

## Target Species

*Parapenaeus longirostris*

FAO Names : en - Deep-water rose shrimp, fr - Crevette rose du large, es - Gamba de altura, ar - إيربيان ووردية أعماق المياه, zh - 长额拟对虾, ru - Креветка розовая глубоководная

*Penaeus notialis*

FAO Names : en - Southern pink shrimp, fr - Crevette rose du Sud, es - Camarón rosado sureño

*Aristeus varidens*

FAO Names : en - Striped red shrimp, fr - Gambon rayé, es - Gamba listada

*Chaceon maritae*

FAO Names : en - West African geryon, fr - Géryon ouest-africain, es - Gerión de Guinea

Adults

## Associated Species (Bycatch)

*Plesionika spp*

FAO Names : en - Plesionika shrimps nei, fr - Crevettes Plesionika nca, es - Camarones Plesionika nep

*Penaeus kerathurus*

FAO Names : en - Caramote prawn, fr - Caramote, es - Langostino

*Aristaeopsis edwardsiana*

*Aristaeomorpha foliacea*

FAO Names : en - Giant red shrimp, fr - Gambon rouge, es - Gamba española

*Lophius spp*

FAO Names : en - Monkfishes nei, fr - Baudroies nca, es - Rapes nep

*Dicologlossa cuneata*

FAO Names : en - Wedge sole, fr - Céteau, es - Acedía

*Solea spp*

FAO Names : null

*Citharus linguatula*

FAO Names : en - Spotted flounder, fr - Feuille, es - Solleta

*Carcharhiniformes*

FAO Names : en - Ground sharks

*Merluccius spp*

FAO Names : en - Hakes nei, fr - Merlus nca, es - Merluzas nep, ru - Мерлузы

*Merluccius polli*

FAO Names : en - Benguela hake, fr - Merlu d'Afrique tropicale, es - Merluza de Benguela, ru - Мерлуза бенгальская

*Helicolenus dactylopterus*

FAO Names : en - Blackbelly rosefish, fr - Sébaste chèvre, es - Gallineta

*Octopus vulgaris*

FAO Names : en - Common octopus, fr - Pieuvre, es - Pulpo común

*Sepia officinalis*

FAO Names : en - Common cuttlefish, fr - Seiche commune, es - Sepia común

## Discarded Species (Bycatch)

*Chlorophthalmus atlanticus*

*Synagrops microlepis*

FAO Names : en - Smallscale splitfin

Juveniles (commercial species) or unspecified (other species)

## Related Fisheries - Fishery(ies) switching activity seasonally or targeting the same stock

Spain Bottom wet fish and freezer trawlers shrimp fishery - Moroccan Atlantic coast waters

Spain Freezer bottom trawl shrimp fishery - Senegalese waters

Spain Freezer bottom trawl shrimp fishery - Guinea Bissau waters

Spain Freezer bottom trawl shrimp fishery - Guinean waters

## Vessel Type

Stern trawlers freezer

Outrigger trawlers

## Flag State

 Spain

Average characteristics of these vessels are 30 m length, 148 GRT and 625 h.p.

### Catch Handling and Processing Equipment

Freezing. Catches are classified in commercial categories (from 0 to 8), depending on their size, and frozen on board.

### Crew

15-18 persons (Spanish, Mauritanian and Senegalese nationality) (2009)

### Fleet segment

Bottom otter trawl targeting crustaceans with minimum 40 mm mesh size

### Fishing Gear

Bottom otter trawls

Bottom shrimp trawls

These shrimpers usually alternate the use of outriggers and the classic bottom otter trawl with trawl doors ("baka" type), depending on the target species. Thus, outriggers are used to fish *P. longirostris* and *F. notialis*, usually during daylight hauls, while the classic bottom otter trawl with trawl doors is employed for a deeper fishery, especially targeting *A. varidens* and *C. maritae*. These last deep hauls are usually made at night.

### Seasonality

November-April and July-August

### Trip Duration

30-90 fishing days

### Ports

Huelva (SW Iberian Peninsula)

### Fishery Indicators

Type	Measure	Value	Unit	Time period
Nominal Effort	Number of vessels	25	vessels	2008
Participation	Number of fishermen	375-450	persons	2009
Production	Catch total	3969	tonnes	2004-2008
	Catch <i>P. longirostris</i>	2496	tonnes	2004-2008
	Catch <i>F. notialis</i>	1027	tonnes	2004-2008
	Catch <i>A. varidens</i>	111	tonnes	2004-2008
	Catch <i>C. maritae</i>	37	tonnes	2004-2008

	Catch other crustaceans	56	tonnes	2004-2008
	Catch fishes and cephalopods	242	tonnes	2004-2008

## Post Harvest

### Fish Utilisation

Wholesale and exportation

### Markets

Huelva (SW Iberian Peninsula)

## Management

Management unit: No

### Jurisdictional framework

Management Body/Authority(ies): Ministère des pêches et de l'économie maritime

**Mandate:** Management.

Area under national jurisdiction: Mauritania

Maritime Area: Exclusive Economic Zone Areas (EEZ).

Management Body/Authority(ies): European Union

**Mandate:** Flag state responsibility for its fishing vessels operating in foreign area under national jurisdiction.

Area under national jurisdiction: Mauritania

Maritime Area: Exclusive Economic Zone Areas (EEZ).

### Legal definition

Vessels fishing for crustaceans other than spiny lobster and crab

### Management Regime

Fisheries Partnership Agreement between the European Community and the Islamic Republic of Mauritania (for the period 1 August 2008 to 31 July 2012) (OJ L 203, 31.07.2008, p. 4–59).

Management measures of the Spanish crustacean trawlers fishery are included in the current Fishery Agreement between the European Community and the Islamic Republic of Mauritania (OJ L 203, 31.07.2008, p. 4–59) under the fishing category number 1: “Vessels fishing for crustaceans other than spiny lobster and crab”.

Fishing agreement expired in July 2012. The new fishing agreement is in the ratification process by the European Parliament.

### Management Methods

**Conservation and management measures with focus on Effort control (licences system), catch control and fish size limits**

- *Aquatic species-related measures*

Minimum sizes and weights of the saltwater fish, cephalopods and crustaceans established by the Fishing Agreement. For crustaceans: pink spiny lobster (*Palinurus mauritanicus*): 23 cm, deepwater rose shrimps (*Parapenaeus longirostris*): 6 cm, red crab (*Chaceon maritae*): 6 cm and southern pink shrimp, caramote prawn (*Farfantepenaeus notialis*, *Melicertus kerathurus*): 200 ind/kg. Limitation of by-catches: 20% fish, 15% cephalopods and 7,5 % crabs. Prohibition of catches of spiny lobster.

- *Gear-related measures*

Gear type (doubling of the cod-end prohibited, doubling of the twine forming the cod-end prohibited; protective aprons authorised in accordance with Article 24 of the Mauritanian Fisheries Code) and mesh size (minimum 50 mm).

- *Vessel-related measures*

Access control: Vessel size (maximum 7 313 GT authorized tonnage per licence period)

- *Fishing activity-related measures*

Licences, vessel number (7 313 GT authorized tonnage per licence period), closed area (out of the fishing area established by the Agreement) and closed season (two periods: May-June and September-October).

### **Related Fisheries - Fishing activity(ies) managed under the same management unit or being ruled by the same fishing agreement**

Spain Bottom wet fish trawlers black hake fishery - Mauritanian waters

Spain Freezing bottom trawlers octopus fishery - Mauritanian waters

Spain Longliners black hake fishery - Mauritanian waters

More information on fisheries legislation at: FAOLEX legislative database

## **Status and Trends**

The yields have been relatively stable during the last ten years, showing inter-annual fluctuations, typical of short-life species as the targeted crustaceans. An effort reduction has occurred from 2004 onwards.

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